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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/548,913	04/13/2000	Brian Mitchell Bass	RAL9-00-0018	7379

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EXAMINER
SHAH, NILESH R

ART UNIT	PAPER NUMBER
2195	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/548,913	BASS ET AL.
	Examiner	Art Unit
	Nilesh Shah	2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 June 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-13* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. Claims 1-3,5-13 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,9 and 10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) The following claim language is not clearly define:

   i. As per claim 1, lines 4 and 6 it is unclear what "some of the information units" are? (i.e. is there a set number, how do you know which units are handled by the time-based calendar?). It is also unclear what "others of the information" are? (is there a set number of units, how do you know which unit are handled by the time-independent calendar?) Claim 9 has similar problems.

        ii.   As per claim 10, it is unclear what "as a result of scheduler ticks" means?

(i.e. is it the number of time cycles between locations; is it a clock pulse or

is it the time slice of queues?)

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a)   A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the
> prior art are such that the subject matter as a whole would have been obvious at the time the invention
> was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability
> shall not be negatived by the manner in which the invention was made.

3. Claims 1-3,5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiussi

et al (6,396,843) (hereinafter Chiussi) in view of Hughes et al (5,835,494) (hereinafter

Hughes).

4. As per claim 1, Chiussi teaches the invention substantially as claimed including a system

for periodically moving information units from a plurality of sources to an output

destination based on information stored about each of the plurality of sources, the system

comprising:

a time-based calendar which handles some of the information units based on the

information stored about the plurality of sources (col. 2 lines 36-45);

a time-independent calendar which handles other of the information units based on information stored about the plurality of sources and which places each source flew into a calendar location and which moves the source flew to a different place in the calendar after servicing the source flow(col. 4 lines 37-45; col. 5 lines 17-30;col. 10 lines 50-53; col. 15 lines 53-65).

5. Chiussi does not specifically teach the use of adding a queue.

Hughes teaches a mechanism for determining when a flow is added to the source whether that source was at a location in the time-based queue calendar and preventing the source flew from being placed at a location ahead of a calculated location in the time-based calendar (col. 11 lines 6-13; col. 4 lines 53-57; col. 15 lines 19-50) and placing the source at a second location that is the calculated location or a next location that is after the calculated location within the time based calendar (abstract; col. 3 lines 25-33; col.6 lines 30-50; col.9 line 50 – col. 10 line 3; col. 12 lines 56-65; col.14 lines 10-21).

6. It would have been obvious to one skilled in the art to at the time of the invention combine the teachings Hughes and Chiussi because Hughes method of adding new queues to the correct calendar would make Chussi's calendar system more adaptable and efficient.

7. As per claim 2, Chiussi teaches a method of servicing data flows placed into a queue for service in turn comprising:

determining whether a queue had a previous position in a calendar the if the queue had a previous position in the calendar (col. 10 lines 50-53; col. 15 lines 53-65).

Hughes teaches determining whether the a new position which would be assigned to it is

earlier than the a previously calendar new position in the calendar (col. 4 lines 53-57; col.

15 lines 19-50);

if the new position which would be assigned is earlier than the previously calculated new

position, using the previously calculated new position(col. 10 lines 24-34; col. 10 lines

46-55);

and, if the previously calculated new position is not earlier than the position which would

be assigned, using the position which would be assigned (col. 4 lines 53-57; col. 10 lines

46-55).

8. As per claim 3 Hughes teaches a method further including considering the aging of the

    queue to determine whether the stored parameters remain valid (col. 11 lines 33-37).

9. As per claim 5, Chiussi teaches a system wherein the plurality of sources include a

    plurality of queues (col. 15 lines 53-55)

10. As per claim 6, Hughes teaches a system wherein the calculated location includes the

    location whereat the queue would have been attached upstream from the location whereat

    said queue was last serviced (col. 11 lines 6-13; col. 4 lines 53-57; col. 15 lines 19-50).

11. As per claim 7, Chiussi teaches a method wherein using includes attaching the queue to

    the selected location (col. 2 lines 30-36).

12. As per claim 8, Chiussi teaches a method wherein the stored parameter includes time

stamps (col. 1 lines 46-53).

13. As per claim 9, Chiussi teaches a system comprising

a time-based calendar which handles some of a plurality of information units based on the

information stored about a plurality of sources(col. 15 lines 53-55).

Hughes teaches a mechanism for determining when a flow is added to a source whether

that source was at a location in the time-based calendar and preventing the source from

being placed at a location ahead of a predefined location in the time-based calendar (col.

4 lines 37-45; col. 5 lines 17-30;col. 10 lines 50-53; col. 15 lines 53-65) and placing the

source at a second location that is the calculated location or a next location that is after

the calculated location within the time based calendar (abstract; col. 3 lines 25-33; col.6

lines 30-50; col.9 line 50 – col. 10 line 3; col. 12 lines 56-65; col.14 lines 10-21; col. 16

lines 47-59).

14. As per claim 10, Chiussi teaches a method comprising:

providing at least one time based calendar having a plurality of locations and a time

pointer moving relative to the plurality of locations as a result of scheduler ticks(col. 5

lines 33-37);

attaching a queue to a first calendar location whereat the time pointer is pointing(col. 8

lines 3 –12; col. 16 lines 60-65);

if examination indicates the queue is not empty, identifying a current location whereat the

time pointer points(col. 16 lines 30-44);

correlating the current location of the time pointer and the second location (col. 8 lines 3

–12; col. 16 lines 51-56); and

selecting a location which is not earlier than the second location (col. 11 lines 44-48).

Hughes teaches servicing said queue by causing a frame to be transmitted from said

queue whereupon said queue goes empty (col. 16 lines 60-67);

examining pre-defined characteristics associated with said queue to determine occupancy

frames within said queue(col. 3 lines 18-22; col. 10 lines 24-30); and

identifying a second location whereat the queue would have been re-attached had it not

gone empty (col. 16 lines 47-59; col. 12 lines 56-65; col.14 lines 10-21).

15. As per claim 11, Hughes teaches a method wherein the not emptied queue is attached to

the selected location (col. 16 lines 60-67).

16. As per claim 12, Chiussi teaches a method wherein the queue is attached by writing the id

(Identification number) of said queue in a stack located at each location (col. 11 lines 26-

35).

17. As per claim 13, Hughes teaches a method wherein the stack is a Last In First Out (LIFO)

stack (col. 14 lines 49-50)

Response to Arguments

18. Applicant's arguments filed 6/01/05 have been fully considered but they are not persuasive. Applicant states a) Hughes does not teach the use of a second location within the time based calendar; b) Hughes and Chuussi do not teach the limitations of claim 4; c) identifying a second location whereat had it not gone empty.

19. As per point a) Hughes teaches the use of a second location (abstract; col. 3 lines 25-33; col.6 lines 30-50; col.9 line 50 – col. 10 line 3; col. 12 lines 56-65; col.14 lines 10-21; col. 16 lines 47-59); b) claim 4 have been canceled; c) Hughes teaches a second location had it not gone empty (col. 16 lines 47-59; col. 12 lines 56-65; col.14 lines 10-21).

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nilesh Shah whose telephone number is (571)272-3771. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Nilesh Shah
Examiner
Art Unit 2195

NS
August 18, 2005

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